

CLAIMS

What I claim is:

- 1 1. A press filter for separating infusion material from an infused liquid in a vessel having an
2 opening at a proximal end of the vessel and a closed distal end, wherein an interior of the
3 vessel has a cross-section with a dimension and the dimension varies with longitudinal
4 distance from the opening such that the vessel has a plurality of dimensions, the filter
5 comprising:
6 a. a compressible filter membrane having pores sized to pass the infused liquid but
7 not the infusion material and configured to maintain contact with the interior of
8 the vessel for each of the plurality of dimensions; and
9 b. a plunger element configured for pushing the compressible filter membrane
10 through vessel from the proximal end substantially to the distal end.
- 1 2. The press filter according to claim 1 wherein the press filter comprises a filter element
2 mounted to a compressible ring.
- 1 3. The press filter according to claim 2 wherein the filter element comprises filter paper and
2 the compressible ring comprises a foam ring.

- 1 4. The press filter according to claim 1 wherein the compressible filter membrane
2 comprises a foam member.
- 1 5. The press filter according to claim 4 wherein the foam member comprises anisotropic
2 foam.
- 1 6. The press filter according to claim 5 wherein the foam member compress radially more
2 readily than along the longitudinal distance.
- 1 7. A press filter assembly for separating infusion material from an infused liquid in a vessel
2 having an opening at a proximal end of the vessel and a closed distal end, wherein an
3 interior of the vessel has a cross-section with a dimension and the dimension varies with
4 distance from the opening such that the vessel has a plurality of dimensions, the filter
5 comprising:
6 a. a flexible compressible filter membrane of a size to at least span the opening and
7 having pores sized to pass the infused liquid but not the infusion material;
8 b. a radially compressible filter support configured to maintain the filter membrane
9 in contact with an interior surface of the vessel; and
10 c. a plunger element coupled to the filter support and configured for pushing the

11 filter support and the filter membrane through vessel from the proximal end
12 substantially to the distal end.

1 8. The press filter assembly according to claim 7 wherein the vessel is a beverage cup
2 substantially comprising a conical frustum.

1 9. The press filter assembly according to claim 8 further comprising a lid for the cup
2 wherein the lid includes an aperture adapted to receive the plunger element.

1 10. The press filter assembly according to claim 7 wherein the filter membrane comprises
2 foam.

1 11. A compressible infusion press for separating infusion material from an infused liquid in a
2 cup shaped as a conical frustum, the cup having an opening with a first radius at a
3 proximal end of the vessel and a closed distal end with a second radius wherein the first
4 radius is larger than the second radius, the compressible infusion press comprising:
5 a. a flexible compressible filter member of a size to at least span the opening and
6 having pores sized to pass the infused liquid but not the infusion material;
7 b. a radially compressible filter support configured to maintain the filter member in
8 contact with an interior surface of the vessel, the compressible filter support

9 having a plurality of arms extending from an interior region and each bending to
10 form a spiral ; and

11 c. a plunger element coupled to the filter support and configured for pushing the
12 filter support and the filter member through vessel from the proximal end
13 substantially to the distal end.

1 12. The compressible infusion press according to claim 11 wherein the flexibly compressible
2 filter member comprises a closed cell foam.

1 13. The compressible infusion press according to claim 11 wherein the flexibly compressible
2 filter member comprises an open cell foam.

1 14. The compressible infusion press according to claim 11 wherein the plunger element is a
2 rod sized to a length substantially coincident with a length of the cup.

1 15. The compressible infusion press according to claim 11 wherein the plunger element is a
2 collection elements selectable according to a cup size.

1 16. The compressible infusion press according to claim 11 wherein the plunger element
2 includes features to adapt to a variety of cup sizes.

- 1 17. The compressible infusion press according to claim 11 further comprising a lid, having
2 an aperture configured to receive the plunger element when the lid is mounted to the
3 proximal end of the cup wherein the plunger element is a rod sized to a length
4 substantially coincident with a top of the lid so mounted.
- 1 18. The compressible infusion press according to claim 17 wherein the rod includes a variety
2 of sizes configured to accommodate a variety of cup sizes.
- 1 19. The compressible infusion press according to claim 11 wherein the plunger element is a
2 configured to selectively attach to the radially compressible filter support.
- 1 20. The compressible infusion press according to claim 11 wherein the plunger element is
2 integrally formed with the radially compressible filter support.